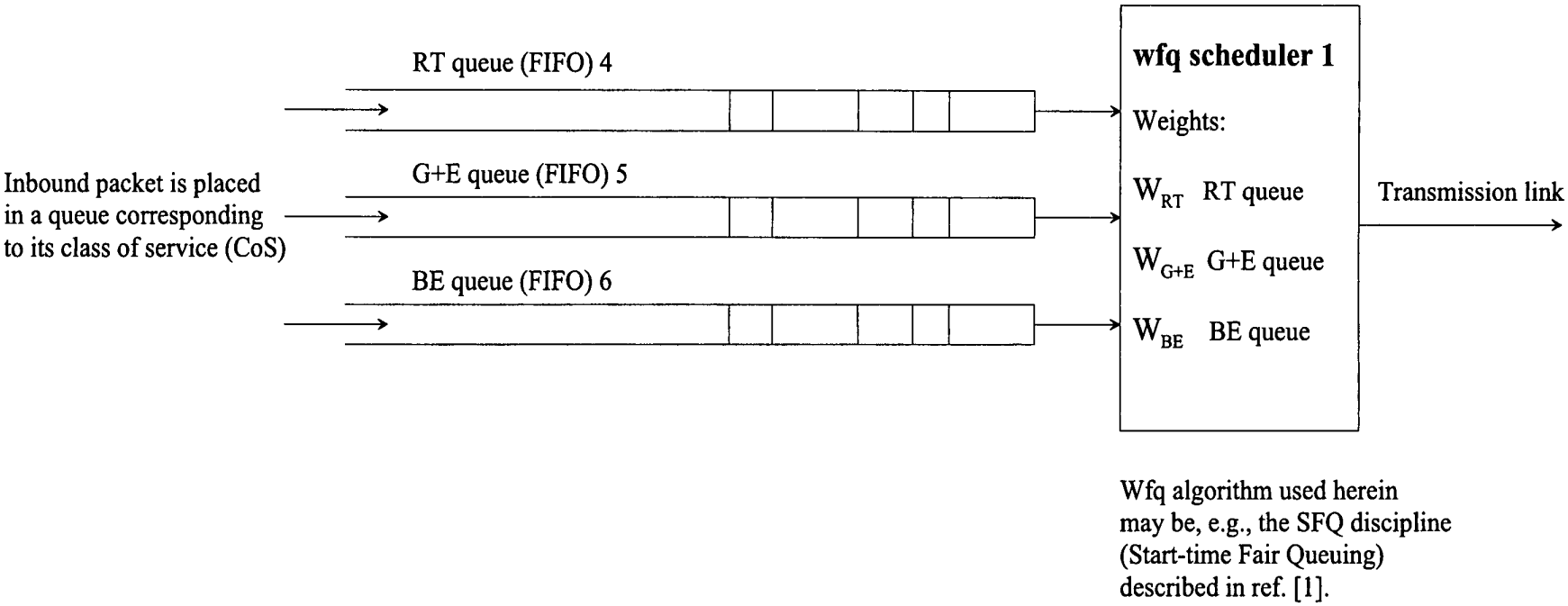

RT queue (FIFO) 4
G+E queue (FIFO) 5
BE queue (FIFO) 6
Inbound packet is placed in a queue corresponding to its class of service (CoS)
wfq scheduler 1
Weights:
W_{RT} RT queue
W_{G+E} G+E queue
W_{BE} BE queue
Transmission link
Wfq algorithm used herein may be, e.g., the SFQ discipline (Start-time Fair Queuing) described in ref. [1].

Fig. 1

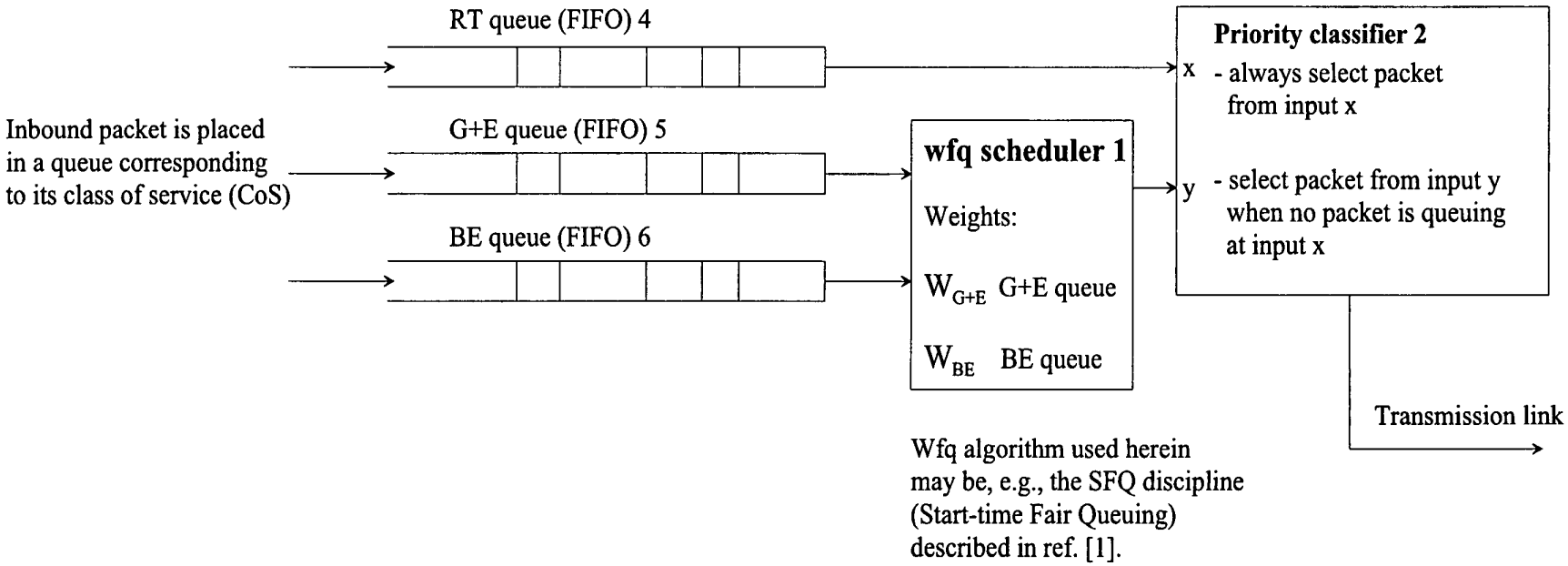

RT queue (FIFO) 4
G+E queue (FIFO) 5
BE queue (FIFO) 6
Inbound packet is placed in a queue corresponding to its class of service (CoS)
wfq scheduler 1
Weights:
W_{G+E} G+E queue
W_{BE} BE queue
Priority classifier 2
x - always select packet from input x
y - select packet from input y when no packet is queuing at input x
Transmission link
Wfq algorithm used herein may be, e.g., the SFQ discipline (Start-time Fair Queuing) described in ref. [1].

Fig. 2

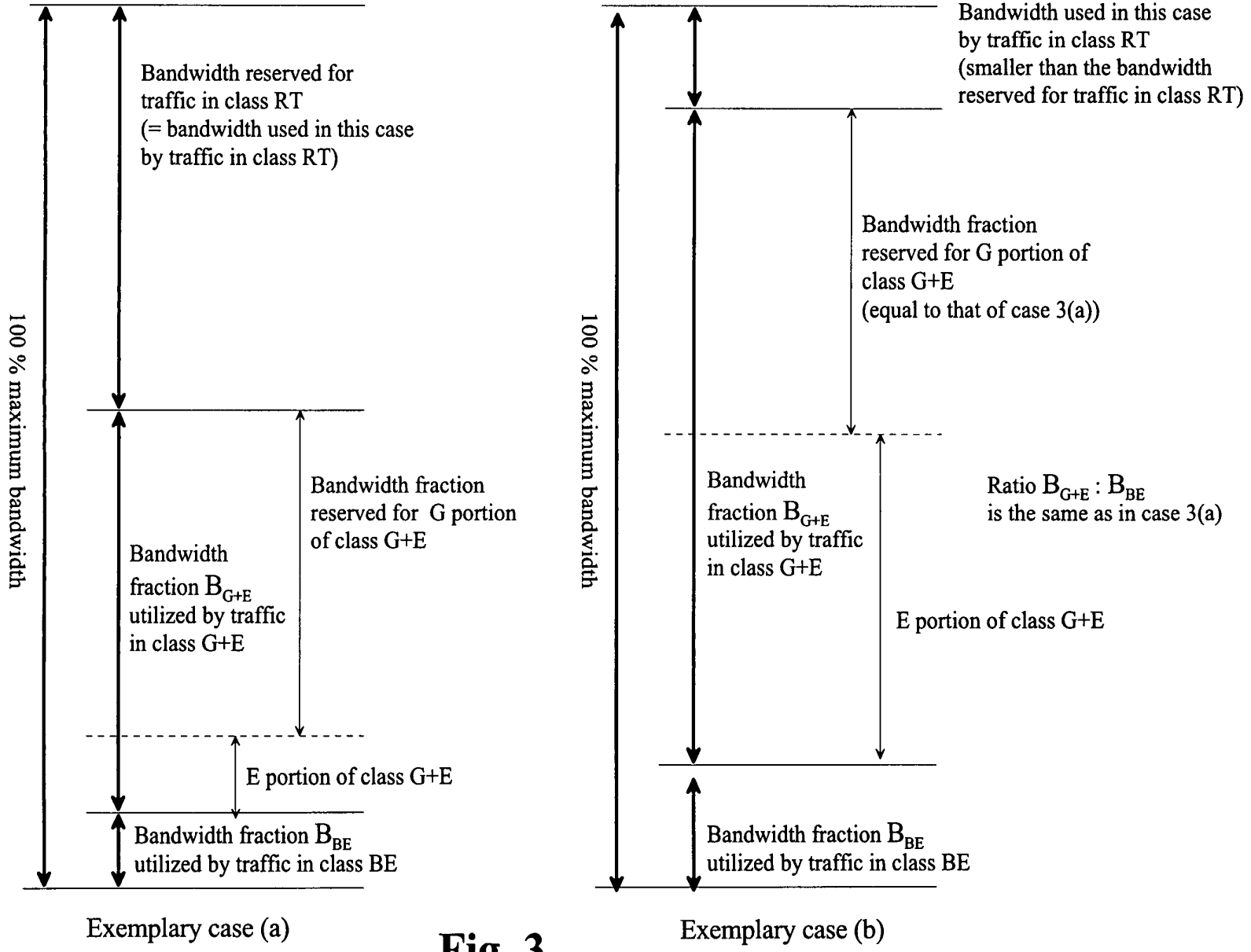
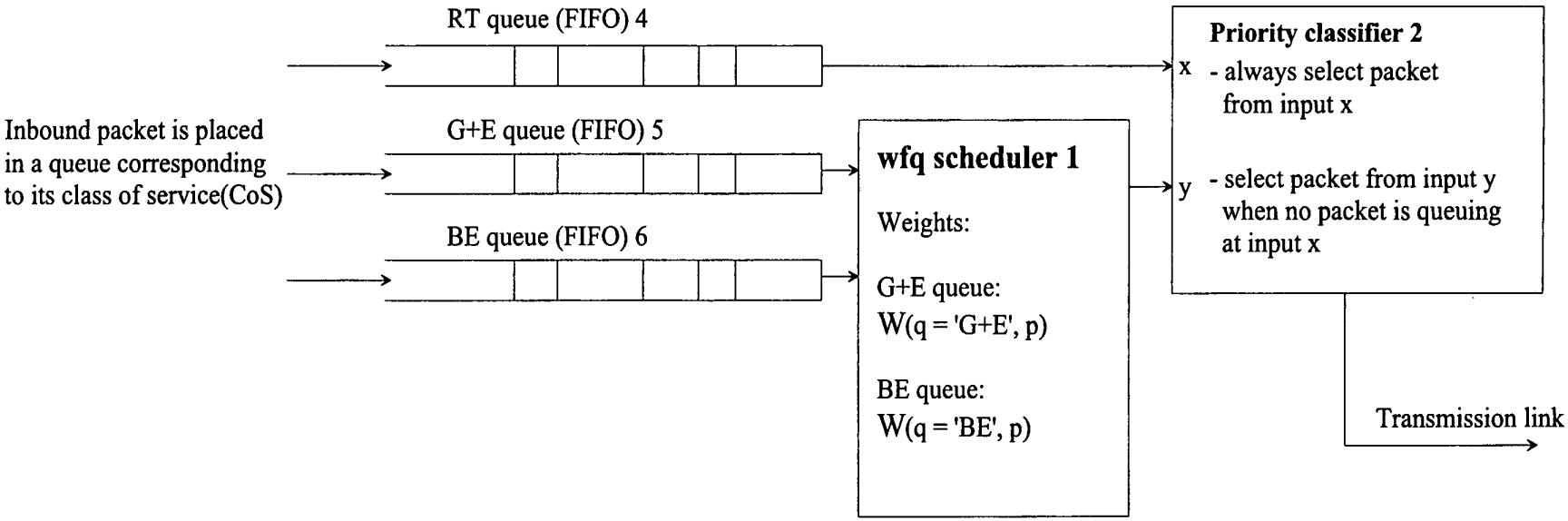

100 % maximum bandwidth
Bandwidth reserved for traffic in class RT (= bandwidth used in this case by traffic in class RT)
Bandwidth fraction reserved for G portion of class G+E
Bandwidth fraction B_{G+E} utilized by traffic in class G+E
E portion of class G+E
Bandwidth fraction B_{BE} utilized by traffic in class BE
Exemplary case (a)
100 % maximum bandwidth
Bandwidth used in this case by traffic in class RT (smaller than the bandwidth reserved for traffic in class RT)
Bandwidth fraction reserved for G portion of class G+E (equal to that of case 3(a))
Bandwidth fraction B_{G+E} utilized by traffic in class G+E
Ratio $B_{G+E} : B_{BE}$ is the same as in case 3(a)
E portion of class G+E
Bandwidth fraction B_{BE} utilized by traffic in class BE
Exemplary case (b)

Fig. 3



Wfq algorithm used herein may be, e.g., the SFQ discipline (Start-time Fair Queuing) described in ref. [1].
The weight is determined based on variables q and p, wherein variable q is dependent on the class of service (G+E or BE) and variable p respectively on the distribution of packets into different subgroups.

Fig. 4